## DEPSCOR FY 06 Department of Defense Experimental Program to Stimulate Competitive Research AFOSR Designated Proposals

Investigator's Name	Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
Andre G. Petukhov	South Dakota School of Mines and Technology	SD	Modeling and Experimental Studies of Spin Transport for Multifunctional Semiconductor Devices	ONR
Christian E. Skalka	University of Vermont	VT	Trace Effect Analysis for Software Security	AFOSR
Christopher C. Landry	University of Vermont	VT	Heterogeneous Catalysis Simulants Using Porous Inorganic Supports	ARO
Chunsheng Wang	Tennessee Technological University	TN	High Power Membrane Fuel Cells for Military Applications	ARO
Clare M. McCabe	Vanderbilt University	TN	A Combined Computational and Experimental Study of Nanoscale Lubrication: Application to Micro- and Nano-Electromechanical Systems	ONR
Darren L. Hitt	University of Vermont	VT	A Dispersed Monopropellant Microslug Approach for Discrete Satellite Micropropulsion	AFOSR
Deborah K. Watson	University of Oklahoma	ОК	Manybosy Applications to Quantum Confined Systems	ARO
Harper Simmons	University of Alaska - Fairbanks	AK	Upper Ocean Interactions: Observations and Modeling	ONR
John F. Mandell	Montana State University	MT	Damage Threshold Characterization in Structural Composite Materials	AFOSR
Kenneth P. Roberts	University of Tulsa	ОК	Quantum Dot Nanocrystals Coupled to DNA Aptamers	AFOSR
Kent D. Sugden	University of Montana	MT	Identification of DNA Lesions Derived from Oxidative Stress	ARO
Lance C. Perez	University of Nebraska	NE	Self-configuration and Localization in Ad Hoc Wireless Sensor Networks	AFOSR
Laura E. Ray	Dartmouth College	NH	Cooperative Control of Dynamic Mobile Robots in Diverse Terrain	ARO
Mark E. Koepke	West Virginia University	WV	Controlling Parameters of Wall-plasma Boundary Sheath for Nanoscale Fabrication and Plasma Processing	AFOSR
Michael A. Sutton	University of South Carolina	sc	Quasi-static and Dynamic Characterization of Advanced Material Systems	ARO
Monica N. Nicolescu	University of Nevada - Las Vegas	NV	Understanding Intent using a Novel Hidden Markov Model Representation	ONR
Omar Manasreh	University of Arkansas - Fayetteville	AR	Multi-color Long Wavelength Infrared Detectors Based on III-V Semiconductor	AFOSR
Pascal R. Van Hentenryck	Brown University	RI	Adaptive and Robust Resource Allocation and Scheduling	ONR
Ram S. Katiyar	University of Puerto Rico - San Juan	PR	Nano-structured Magneto-electric Composites: Design and Development for Multi-functional Devices	ARO
Randolph V. Lewis	University of Wyoming	WY	Designing Proteins for Materials Applications	AFOSR
Richard R. Schultz	University of North Dakota	ND	Real-time Super-resolution Reconnaissance and Surveillance Imagery	ARO
Robert A. Schill	University of Nevada - Las Vegas	NV	Stimulated Electron Desorption Studies from Microwave Vacuum Electronics/High Power Microwave Materials	AFOSR
Stephen Ducharme	University of Nebraska	NE	Nanostructure-Designed Dielectric Materials for High-Energy-Density Capacitors	ONR
Tian-You Yu	University of Oklahoma - Norman	ОК	Meteorological Studies with the Phased Array Weather Radar	ONR
Zhaoyang Fan	Kansas State University	KS	Rare Earth Doped III-Nitrides for Optical Communications	ARO